

# SWAN RIVER NATIONAL WILDLIFE REFUGE

Kalispell, Montana

## ANNUAL NARRATIVE REPORT

Calendar Year 2003

U.S. Department of the Interior  
Fish and Wildlife Service  
NATIONAL WILDLIFE REFUGE SYSTEM


# REVIEWS AND APPROVALS


## SWAN RIVER NATIONAL WILDLIFE REFUGE

Kalispell, Montana

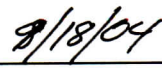
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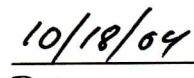
  
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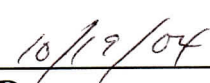
  
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Refuge Supervisor Review

  
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Regional Office Approval

  
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# INTRODUCTION

The Swan River National Wildlife Refuge (NWR), is located in northwest Montana, 38 miles southeast of the town of Creston, in the serene and picturesque Swan Valley Mountain Range. The Refuge was established in 1973 at the request of Montana Senator Lee Metcalf, who often hunted the area and desired to see it preserved. The refuge was established under the authority of the Migratory Bird Conservation Act. It consists of 1,568 acres, with an additional 210-acre Forest Service in-holding that is managed under a Memorandum of Understanding. The refuge boundary lies within the flood plain of the Swan River above Swan Lake and between the Swan Mountain Range to the east and the Mission Mountain Range to the west. The valley was formed when glacial water poured down the steep slopes of the Mission Range into Flathead Lake. The valley floor is generally flat, but rises steeply to adjacent forested mountain sides. Approximately 80 percent of the refuge lies within this valley flood plain, which is composed mainly of reed canary grass. Deciduous and coniferous forests comprise the remaining 20 percent. Swan River, which once meandered through the flood plain, has been forced to the west side of the refuge by past earthquakes and deposits of silt. The result of these geologic events is a series of oxbow sloughs within the refuge flood plain.

The purpose of the refuge is "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." Objectives of the refuge are to provide for waterfowl habitat and production and to provide for other migratory bird habitat. The refuge also provides a nesting site for a pair of southern bald eagles and a variety of other avian species. In addition, deer, elk, moose, beaver, bobcat, black bear, and grizzly bears are known to inhabit the area. There are no significant developments or facilities on the refuge and present management is directed at maintaining the area in its natural state. The refuge is a satellite unit of the National Bison Range Complex. Day-to-day administration and operations are the responsibility of the on-site Assistant Refuge Manager located at Lost Trail National Wildlife Refuge, Marion, Montana.

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## A. HIGHLIGHTS

Swan Refuge had little "highlighted" activity in 2003. The refuge is maintained in its natural state each year; no management was applied in 2003.

## B. CLIMATIC CONDITIONS

With the exception of total annual snowfall amounts and temperature extremes, climatic conditions on the refuge are similar to climatic conditions in the Flathead Valley. No exact weather data is available for the refuge.

In 2003, the weather of the Flathead Valley was best described as hot, dry and smoky during the summer months, with sub-zero temperatures the last two months of the year. The high for the year was 101 degrees on July 23, the first time since 1975 that temperatures topped the century mark. The low was -13 degrees on December 30. There were 34 days during the year with temperatures of 90 degrees or more (13 days are normal) making 2003 the fourth warmest summer on record.

Extremely dry conditions resulted in numerous forest fires beginning in late June and going well into late September. Fortunately, no fires occurred on the refuge this year. In 2003, the U.S. Weather Service reported Kalispell's precipitation totaled 12.25 inches, 3.47 inches (22%) below the 109-year average. This was the fifth consecutive year of below average precipitation in northwest Montana.



**Figure 1** On July 18, persistent hot and dry weather conditions resulted in Stage I fire restrictions being implemented on all public lands in northwest Montana. Fire restrictions were elevated to Stage II on the 18<sup>th</sup> as moisture levels in 1000 hour fuels dipped to below 10%. RW 7/03).

## C. LAND ACQUISITION

### 1. Fee Title

There was no land acquisition to the refuge in 2003.

### 2. Easements

Nothing to report.

### 3. Other

Nothing to report.



## D. PLANNING

### 1. Master Plan

Nothing to report.

### 2. Management Plan

Nothing to report.

### 3. Public Participation

Nothing to report.

### 4. Compliance with Environmental and Cultural Resource Mandates (CECRA)

Nothing to report.

### 5. Research and Investigations

Nothing to report.

### 6. Other

Nothing to report.

## E. ADMINISTRATION

### 1. Personnel

The Swan River NWR is a satellite unit of the National Bison Range Complex (NBR). The Refuge is administered as an entity of the "north valley units." On-site Refuge Manager, Ray Washtak directs operations on the Refuge from the Refuge office at Lost Trail Refuge, Marion, Montana, nearly 100 miles away. Washtak plans and directs daily activities such as budgeting, administrative and operational functions. Supervision is afforded by the Project Leader at NBR.

On May 22, John Ringham, EOD'd as a 1040-maintenance worker. John was headquartered at Lost Trail refuge, but assisted with maintenance on Swan Refuge.

### 2. Youth Programs

Nothing to report.

### 3. Other Manpower Programs

Nothing to report.

### 4. Volunteer Programs

Dick and Bev Sherman continued their volunteer efforts this year by keeping the informational kiosk stocked with refuge brochures and bird lists as well as completing periodic maintenance on the viewing platform. The volunteers also maintained refuge boundary signs, replacing them as needed and "weed-whipping" around the signs to eliminate dense vegetation. Their volunteer hours totaled 85 for the year.

**Table 1. Volunteers and volunteer hours for 2003.**

Activity	Volunteer Hours
Habitat Restoration Riverine Restoration	40
Habitat Management Pest Plant Control	5
Public Education and Recreation Provide Visitor Services	40
<b>TOTALS</b>	<b>85</b>

## 5. Funding

Administrative and operational funding for the refuge is included in the overall annual appropriation of the NBR Complex. Specific funding needs for the refuge are submitted to the project leader via annual work plan submissions. See the NBR annual narrative for specific details.

## 6. Safety

Nothing to report.

## 7. Technical Assistance

Nothing to report.

## 8. Other

Nothing to report.

## F. HABITAT MANAGEMENT

### 1. General

Nothing to report.

### 2. Wetlands

Approximately 1,254 acres of the refuge are classified as a wetland/grassland complex. All of these acreage lies within an "alluvial flood plain" adjacent to the south end of Swan Lake. Vegetation is composed primarily of monotypic stands of reed canary grass.

With the exception of a culvert under Bog Road in Spring Creek and a staff gauge within the creek, which in the past has been used for recording water flow levels, no other water control structures, water facilities or water developments exist on the refuge.

Flooding of refuge occurs on an annual basis in May, June, and July. Flood waters flow into the refuge from several tributaries: Swan River, Bond Creek, Yew Creek, and Spring Creek. In 2003, approximately 65% of the refuge was flooded during the months of May and June. Flood waters receded in July and by August all reed canary grass meadows on the refuge were nearly dry.

### 3. Forests

Forested areas comprise approximately 313 acres of the refuge. Wooded tracts lie primarily on the west, south, and southeastern portions of the refuge. Tree species include old growth fir, spruce, cedar, and larch. Large cottonwood trees are found along the banks of the Swan River. All forested units are maintained in their natural state.

### 4. Croplands

Nothing to report.

### 5. Grasslands

Nothing to report.

## **6. Other Habitats**

Nothing to report.

## **7. Grazing**

There was no grazing on the refuge in 2003 due to lack of willing permittees.

## **8. Haying**

There was no haying on the refuge in 2003 due to lack of willing permittees.

## **9. Fire Management**

Nothing to report.

## **10. Pest Control**

Nothing to report.

## **11. Water Rights**

Nothing to report.

## **12. Wilderness and Special Areas**

Nothing to report.

## **13. WPA Easement Monitoring**

Nothing to report.

## G. WILDLIFE

### 1. Wildlife Diversity

Nothing to report.

### 2. Endangered and/or Threatened Species

The bald eagle pair was observed incubating in early May. Volunteers Dick and Bev Sherman reported two eaglets in the nest later in the month. The bald eagle pair have hatched and fledged 27 eaglets since 1985.

As in past years, "transient" bald eagles were observed on the Refuge on several occasions this year. The eagles were observed resting and loafing in the large cottonwood trees along the banks of Swan River.

### 3. Waterfowl

#### a. Ducks

Due to time constraints and other ongoing responsibilities, duck pair counts were not completed this year.

The refuge provides habitat and nesting sites for 23 species of waterfowl. The most popular species that can be observed are: mallard, common goldeneye, cinnamon teal, blue wing teal, wigeon, lesser scaup, wood duck, common merganser, red head, ring-neck, and Canada goose. These species can be observed during most months of the year. No population surveys were conducted this year.

#### b. Geese

Canada goose populations are based on random observations made in conjunction with ongoing refuge projects. The early April aerial pair count was not completed this year due to budget constraints. The goose productivity flight was flown in early June; twelve goslings were observed on the refuge during this year's flight. As in past years, this may or may not represent actual refuge production since goslings are often hard to observe due to heavy vegetation on the refuge which limits our observation attempts and the fact goslings often migrate to other "off-refuge" areas on the river and lake.

#### 4. Marsh and Water Birds

Annual flooding on the refuge in the late spring and early summer months provided excellent marsh habitat for sora, rails, pied-billed grebes, red-necked and horned grebes, American bitterns, great blue herons, and many other species of marsh and water birds. Populations peak during the mid and late summer months. As cooler weather sets in, the birds depart for warmer climates. Nesting probably occurs on the Refuge; however, no formal nesting searches are conducted.

#### 5. Shorebirds, Gulls, Terns and Allied Species

Species utilizing the refuge included California and ring-billed gulls, black tern, Wilson's phalarope, common snipe, American avocet, kill deer, and several species of sandpipers. Populations peak in July and August.

#### 6. Raptors

Coniferous and deciduous forest areas on the refuge continued to offer excellent resting and loafing sites for many raptor species. Northern harriers, Swainson's hawks, red-tailed hawks, and great-horned owls were observed on nearly every visit to the refuge.

#### 7. Other Migratory Birds

In past years, as many as 64 species of nongame migratory birds have been observed utilizing the Refuge during the spring, summer, and early fall months. Red-winged blackbirds, common yellow-throats, song sparrows, tree swallows, and common snipe are the most frequently observed species.

#### 8. Game Mammals

The Refuge continues to provide an excellent year-round habitat for many indigenous big game mammals. Deer and elk tracks are commonly seen in most upland areas on the Refuge and on Bog Road. Black bear scat has been commonly observed in areas bordered by Nature Conservancy lands. In the late summer and early fall months, cow moose and their calves are often observed in marshy areas in the northwest corner of the Refuge. Elk are known to calve on the refuge in early summer; old growth fir and spruce groves provide a winter habitat as the elk migrate from higher snow-packed mountains.

White-tailed deer are the most commonly observed game mammal. No formal population surveys were conducted this year.

## **9. Marine Mammals**

Nothing to report.

## **10. Other Resident Wildlife**

Coyotes, beaver, muskrat, and raccoons inhabit the Refuge. Observations were generally made near the river or on backwater sloughs with the Refuge.

## **11. Fisheries Resources**

Game fish common to Swan Lake and portions of Swan River include yellow perch, bull trout, northern pike, kokanee salmon, largemouth bass, cutthroat, brook trout, and mountain whitefish. The entire Refuge, including Spring Creek, is closed to fishing from March 1 through July 1 (Section H.1.)

## **12. Wildlife Propagation & Stocking**

Nothing to report.

## **13. Surplus Animal Disposal**

Nothing to report.

## **14. Scientific Collections**

Nothing to report.

## **15. Animal Control**

Nothing to report.

## **16. Marking and Banding**

Nothing to report.

## **17. Disease Prevention and Control**

Nothing to report.



## **H. PUBLIC USE**

### **1. General**

Despite the refuge's generally secluded, out-of-the-way location, lack of established interpretive foot trails and annual flooding, non-consumptive public use of the refuge continues. As in past years, the majority of refuge visitors are those individuals vacationing in Montana and residents of the town of Swan Lake and surrounding communities. The refuge is listed in "Montana's Wildlife Viewing Guide" as a wildlife viewing area.

As in past years, there is no accurate way of determining exact public use or number of visits.

### **2. Outdoor Classrooms - Students**

Nothing to report.

### **3. Outdoor Classrooms - Teachers**

Nothing to report.

### **4. Interpretive Foot Trails**

Nothing to report.

### **5. Interpretive Tour Routes**

Nothing to report.

### **6. Interpretive Exhibits/Demonstrations**

Nothing to report.

### **7. Other Interpretive Programs**

Nothing to report.

## 8. Hunting

Approximately 40 percent of the Refuge is open to waterfowl hunting. The majority of the waterfowl hunt area is located north of Bog Road, along portions of the Refuge's lake shoreline and along portions of Swan River. Steel shot is required. Big game and upland game bird hunting is prohibited.

The 2004-2004 duck and goose season opened on September 27 with an early opening weekend hunt for "youth only." The general waterfowl season opened the following weekend on October 4. Opening day hunter activity and success was light. Temperatures dipped below zero in early November, essentially ending the season as remaining waterfowl headed south to warmer climates.

## 9. Fishing

The annual closure period limits spring and early summer fishing activity on the refuge. After July 15, anglers often venture into Spring Creek looking for pike; however, success has always been limited due to heavy vegetation in the creek. Those portions of Swan River which flows through the Refuge are open to fishing the entire year. Fishing activity is often limited in the river due to high water levels during the spring and early summer months and low flows in late summer and early fall.

The most popular fishing spot on Swan Lake continued to be at the mouth of Spring Creek just outside the refuge boundary. Northern pike lie in the offshore reed beds before going upstream to spawn in the dense aquatic vegetation inside the refuge. Fishermen often take advantage of the situation by anchoring just outside the refuge boundary in hopes of catching "the big one." In years past, several pike weighing 25 pounds or more have been caught.

## 10. Trapping

Nothing to report.

## 11. Wildlife Observation

Nothing to report.

## 12. Other Wildlife-Oriented Recreation

Nothing to report.

### **13. Camping**

Nothing to report.

### **14. Picnicking**

Nothing to report.

### **15. Off-Road Vehicle Use**

Nothing to report.

### **16. Other Non-Wildlife Oriented Recreation**

Nothing to report.

### **17. Law Enforcement**

In 2003, law enforcement efforts continued to be coordinated with Montana Fish, Wildlife, and Parks wardens. The isolated nature of the refuge and its distance from the Lost Trail Refuge headquarters often makes LE investigations difficult due to the "after the fact" response time. The most common enforcement complaints received this year from the public was the continued snowmobile trespass during the winter months. No citations were issued this year.

In October, refuge volunteers replaced numerous boundary signs that had been vandalized by irresponsible individuals; see figure 2, page 14.

### **18. Cooperating Associations**

Nothing to report.

### **19. Concessions**

Nothing to report.



**Figure 2** Refuge volunteers Dick and Bev Sherman replaced many boundary signs that had been destroyed. Photo courtesy of Dick Sherman, 10/03.

# I. EQUIPMENT AND FACILITIES

## 1. New Construction

Nothing to report.

## 2. Rehabilitation

In August, fire severity crews assisted the refuge staff with installation of the new 4 foot by 8 foot refuge sign. See figure 3.



Figure 3

RW

## 3. Major Maintenance

Nothing to report.

#### **4. Equipment Utilization and Replacement**

All equipment on Lost Trail Refuge is utilized for ongoing daily operations and work activities on Flathead County WPA's and Swan River NWR. See the Lost Trail NWR annual narrative report for specific details.

#### **5. Communications Systems**

Nothing to report.

#### **6. Computer Systems**

Nothing to report.

### **J. OTHER ITEMS**

#### **1. Cooperative Programs**

Nothing to report.

#### **2. Other Economic Uses**

Nothing to report.

#### **3. Items of Interest**

Nothing to report.

#### **4. Credits**

Ray Washtak supplied information and the final draft for this narrative. Initial drafts, typing and editing and final compilations were completed by Terri Middlemist at the National Bison Range.

### **K. FEEDBACK**

Nothing to report.